HR001119S0030

Competency-Aware Machine Learning (CAML) Frequently Asked Questions (FAQs) as of 3/5/19

6Q: Attachments reference HR001118S0030 6A: Yes, this is a typo. HR001119S0030 is correct.

5Q: BAA HR001119S0030 Attachment G, number 8 Publication of Grant Awards requests to "[Provide a 1-page explanation of the proposed effort as outlined in Section VI.B.10.]"

Please clarify:

- (1) is this section required for procurement contract proposals (since it appears to be relevant to Grant Awards)?
- (2) what "explanation" is required? BAA Section VI.B.10 is "Disclosure of Information and Compliance with Safeguarding Covered Defense Information Controls".
- 5A: This requirement under paragraph 8 of Attachment G should be disregarded because it applies only to grants and DARPA does not intend to award grants under this BAA.
- 4Q: I saw nothing in the CAML BAA web program regarding ownership of the concept *after* the DARPA contract. Where can I locate this information?
 - 4A: Please refer to Section VI of the BAA titled Award Administration Information. Specifically, Section VI.B Administrative and National Policy Requirements, and Section VI.B.4 Intellectual Property.
- 3Q: Per the BAA "Proposers should discuss how their system design would facilitate integration into Government test platforms" As the BAA does not specify in detail the government test platform, it may be impossible to accurately describe the manner in which this integration would occur. Can we get some clarification on the government test platform?
 - 3A: Please refer to Section I.E of the BAA TA4 description, specifically the first full paragraph on Page 9 in the BAA. "For planning purposes, proposers may use the autonomous ground resupply vehicles as the reference platform and **provide the ROM estimate** of the development effort supporting all three demonstration vignettes discussed below. Proposers whose machine learning problems do not fit the autonomous vehicle platform may use an alternative platform from the examples discussed above or another DoD relevant platform as the reference platform."
- 2Q: Per the BAA "Proposals should discuss how the learning system would provide a semantic interpretation of the emergent meta-knowledge" Could we get a clarification of what semantic interpretation means in this context?
 - 2A: In this context, "semantic interpretation" means that the emergent meta-knowledge derived from task strategy analysis should have a description that is understandable to the

human user. As a hypothetic example, if an object recognition system persistently relies on a region of pixels around an object for its recognition and the region is associated with the object cast shadow, then the "semantic interpretation" should state that the task has a dependency on the "cast shadow", instead of a neighboring region of pixels. The exact forms of the descriptions are dependent on the meta-knowledge and user applications and should be decided by the performers.

1Q: Per the BAA "Competency statements should facilitate accurate human insight into machine system capabilities and enable machine systems to achieve self-maintenance of performance based on a human partner's expectations". What is the level of autonomy expected in the self-maintenance? Is each proposer expected to define how the human partner's expectations are communicated to the machine?

1A: In the CAML BAA, the machine is expected to report its performance to a human user; the machine is not expected to be able to improve its performance beyond its training. Yes, proposers should define how the human partner's expectations are communicated to the machine. Please refer to the scenarios described in TA4: Capability Demonstration for examples of self-maintenance and human partner expectation inputs expected for experimentations and demonstrations. Proposers should describe unique aspects of self-maintenance that their approaches may provide.